UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,102	03/11/2004	Shinji Baba	Q80311	4590

23373 7590 11/21/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
COMAS, YAHVEH	
ART UNIT	**PAPER NUMBER**
2834	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,102	BABA ET AL.	
	Examiner	Art Unit	
	Yahveh Comas	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/8/2006 have been fully considered but they are not persuasive for the following reason:

Applicant argument regarding the office action not addressing the features of claims 2-4, 8, 11 and 12 is not persuasive because the rejection of the last office action contain all the features presented in said claims.

Applicant argument that Koehly does not show a non-magnetic metal is not persuasive because the end plates are not just made of aluminum which is well know as a non-magnetic metal but also are coat with insulation material 36.

In response to applicant's arguments against the references individually (such as Koehly not showing a second portion and Wong not showing two end plates), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instance case Koehly shows the stator having two end plates but does not show the second portion by itself. However, as stated in the last office action, Koehly is combined with Wong to disclose the use of a second portion in order to protect the windings from damage and to reduce the build up of dust. Therefore the rejection is sustained.

Applicant argument that Wong material for the end plates (10a and 10B) has to be non-metallic is not persuasive because Wong is presented to show applicant that a

second extension in a circumferential direction of the end plate is well know in the art in order to avoid damage and reduce the build up dust and as disclose above, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Uchiyama disclose the claimed invention except for the end plate protection for the windings. However Koehly is presented to show that the use of end plates made of a non-magnetic material such as aluminum which as the same time is cover with a insulation material 36 are use to protect the stator winding. Further Wong is combined to show applicant that the extension of the end plate in the circumferential direction in order to avoid damage and reduce the build up dust is also well know in the art. Therefore the combination is proper and the rejection is sustained.

Applicant argument regarding the combination of Uchiyama in view of Koehly and in further view of Wong not showing a second portion having a projection portion that project from the second portion of the respective tooth is not persuasive because Koehly disclose a projection that is extending from the end of the rib 34 (column 4 lines

60-70). As show above, when the rib 34 are combined with the extensions in a circumferential direction as show by Wong the result of this combination is and end portion in the rib having a projection in the axial direction and an extension in the circumferential direction over the tooth. Therefore the rejection is sustained.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The specification or drawings does not disclose a projection portion beyond the second portion of the tooth in the circumferential direction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama U.S. Patent No. 5,767,601 in view of Koehly et al. U.S. Patent No. 3,196,304 in further view of Wong et al. U.S. Patent No. 5,304,885.

Uchiyama disclose a flywheel having a cylindrical portion and rotating about a rotation axis, a plurality of magnets disposed on an inner circumferential surface of the cylindrical portion of the flywheel and rotating together with the flywheel; a stator core having a laminated core formed by a plurality of magnetic thin plates, the laminated core having an annular portion and a plurality of teeth projecting from the annular portion outward and opposed to the plurality of magnets. Uchiyama disclose the claimed invention except for said stator having two end plates that are made of metal material and disposed on both sides of the laminated core and a second portion of the end plates that is laid on the second portion of each of the teeth. Regarding the stator having two end plates made of metal material and disposed on both sides of the laminated core, Koehly discloses a flywheel (10) having a cylindrical portion and rotating about a rotation axis; a plurality of magnets disposed on an inner circumferential surface of the cylindrical portion of the flywheel and rotating together with the flywheel; a stator core (L) having a laminated core formed by laminating a plurality of magnetic thin plate,

the laminated core having an annular portion and a plurality of teeth (T) projecting from the annular portion outward and opposed to the plurality of magnets; and a plurality of generation coils (W), each of generation coils wound on the respective teeth of the laminated core, wherein: the stator core (L) has two end plates (34) that are made of a metal material and disposed on both sides of the laminated core in such a manner that the laminated core is sandwiched in between; each of the teeth of the laminated core has a first portion (34) extending in a radial direction and a second portion projecting in a circumferential direction from an outer end of the first portion on both sides thereof; at least the first portion of each of the two end plates is smaller in circumferential width than the first portion (34) of each of the teeth (T), each of the two end plates has a first portion that is laid on the first portion of each of the teeth (T) made of a non-magnetic metal material such as aluminum.

Regarding the stator having a second portion of the end plates that is laid on the second portion of each of the teeth, Wong discloses a winding end protection (10) having a first (20) and a second portion (24) laid on a teeth stator having an smaller circumferential width than the second portion of each of the teeth wherein the second portion is made of a non-magnetic material in order to reduce the build up of dust.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide stator having two end plates made of metal material and disposed on both sides of the laminated core as disclosed by Koehly, and a second portion made of non-magnetic material as disclosed by Wong since that would had been desirable protect the winding from damage and also reduce the build up of dust.

Regarding claims 5-7, 9 and 18-19, Koehly disclose the use of non-magnetic material for the end plates in order to protect the winding, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use stainless steel, since it has been held to be within the general skill of the worker in the art to select a know material on the basis of its suitability for intended use as matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 10, it would have been an obvious matter of design choice to provide a thinner end plate, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Regarding claims 2-4, 13-14, 16-17 and 23-24, Koehly disclose the use of an axial chamfered projection (39) located at the end of each cast rib (15) in order to provide an abutment or stop for wiring (page 4, column 60-67). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide stator having two end plates wherein the a project portion that projects from the second portion of a respective tooth since that would had been desirable to provide an abutment or stop for wiring.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is 570-272-2020. The examiner can normally be reached on 8:00am-5:00pm M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC

DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800